



01P-1645 #4

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Carl W. Anderson, et al. Examiner: Unassigned

Serial No.: 09/695,437

Group Art Unit: 1645

Filed: October 24, 2000

For: DNA-PK ASSAY

Honorable Commissioner of
Patents and Trademarks
Washington, D.C. 20231

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INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R. 1.56 and 1.97

Sir:

In order to fulfill the requirements of candor and good faith set forth in 37 C.F.R. § 1.56, Applicant submits herewith the following Information Disclosure Statement in accordance with the provisions of 37 C.F.R. § 1.97 and § 1.98.

CERTIFICATE OF MAILING (37 CFR 1.8a)

I hereby certify that this paper (along with any papers referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231.

5/7/01
Date

Maria Pacella
Maria Pacella, Office of Intellectual Property
and Industrial Partnerships

This Information Disclosure Statement is submitted under 37 CFR 1.97(b), or (within three months of filing application; or date of entry of international application; or before mailing date of first office action on the merits; whichever occurs last).

PATENT PUBLICATIONS

Burrell et al. "Kits for Detecting Amplification of Human MDM2", U.S. Patent No. 5,606,044.

NON-PATENT PUBLICATIONS

Anderson, et al., "The Human DNA-Activated Protein Kinase, DNA-PK: Substrate Specificity", Methods in Protein Structure Analysis, Plenum Press, NY, 1995 pp 395-406

Anderson et al., "The Human DNA-activated protein kinase, DNA-PK, is activated by DNA breaks and phosphorylates nuclear DNA-binding protein substrates on serines and threonines following glutamine", J. Protein Chem. Vol. 13, No. 5, pages 500-508.

Finnie, et al., "DNA-Dependent Protein Kinase Activity is Absent in XRS-6 Cells: Implications for Site-Specific Recombination and DNA Double-Strand Break Repair", Proc. Natl. Acad. Sci. USA, 92: 320-324 (1995).

Picksley, et al., "Immunochemical Analysis of the Interaction of p53 with MDM2; - Fine Mapping of the MDM2 Binding Site on p53 using Synthetic Peptides", Oncogene, 9: 2523-2529 (1994).

Lin, et al., "Several Hydrophobic Amino Acids in the p53 Amino-Terminal Domain Are Required for Transcriptional

Activation, Binding to MDM-2 and the Adenovirus 5 E1B 55-kD Protein", Genes & Development, 8: 1235-1246 (1994).

Kemp, et al., "Design and Use of Peptide Substrates for Protein Kinases", Methods in Enzymology, 200: 121-134 (1991).

Pearson, et al., "Protein Kinase Phosphorylation Site Sequences and Consensus Specificity Motifs: Tabulations", Methods in Enzymology, 200: 62-81 (1991).

Glass, et al., "Isolation of Phosphorylated Peptides and Proteins on Ion Exchange Papers", Analytical Biochemistry, 87: 566-575 (1978).

Lees-Miller, et al., "Human Cells Contain A DNA-Activated Protein Kinase That Phosphorylates Simian Virus 40 T Antigen, Mouse p53, and the Human Ku Autoantigen", Molecular and Cellular Biology, 10: 6472-6481 (1990).

Chen, et al., "The Human DNA-Activated Protein Kinase Phosphorylates Simian Virus 40 T Antigen at Amino- and Carboxy-Terminal Sites", Journal of Virology, 65: 5131-5140 (1991).

Jackson, et al., "Preparation and Use of Nuclease-Treated Rabbit Reticulocyte Lysates for the Translation of Eukaryotic Messenger RNA", Methods in Enzymology, 96: 52-74 (1983).

Ballinger, et al., "Studies of the Kinetics and Ionic Requirements for the Phosphorylation of Ribosomal Protein S6 after Fertilization of Arbacia punctulata Eggs", Developmental Biology, 101: 192-200 (1984).

Lees-Miller, et al., "Human DNA-Activated Protein Kinase Phosphorylates Serines 15 and 37 in the Amino-Terminal Transactivation Domain of Human p53", Molecular and Cellular Biology, 12: 5041-5049 (1992).

Lees-Miller, et al., "Two Human 90-kDa Heat Shock Proteins Are Phosphorylated In Vivo at Conserved Serines That Are Phosphorylated In Vitro by Casein Kinase II", The Journal of Biological Chemistry, 264: 2431-2437 (1989).

Stenger, et al., "Formation of Stable p53 Homotetramers and Multiples of Tetramers", Molecular Carcinogenesis, 5: 102-106 (1992).

Agostinis, et al., "A Synthetic Peptide Substrate Specific for Casein Kinase-1", FEB Letters, 259: 75-78 (1989).

Casnellie, "Assay of Protein Kinases Using Peptides With Basic Residues for Phosphocellulose Binding", Methods in Enzymology, 200: 115-120 (1991).

Lees-Miller, et al., "The Human Double-stranded DNA-activated Protein Kinase Phosphorylates the 90-kDa Heat-shock Protein, hsp90 α at Two NH₂-terminal Threonine Residues", The Journal of Biological Chemistry, 264: 17275-17280 (1989).

Soussi, et al., "Structural Aspects of the p53 Protein in Relation to Gene Evolution", Oncogene 5: 945-952 (1990).

Dayhoff, "A Model of Evolutionary Change in Proteins", Atlas of Protein Sequence and Structure, 5: 345-352 (1978).

Muszyhaka, et al., "Selective Adsorption of Phosphoproteins on Gel-Immobilized Ferric Chelate", Biochemistry, 25: 6850-6853 (1986).

Andersson, et al., "Isolation of Phosphoproteins by Immobilized Metal (Fe^{3+}) Affinity Chromatography", Analytical Biochemistry, 154: 250-254 (1986).

Buss, et al., "Measurement of Chemical Phosphate in Proteins", Methods in Enzymology, 99: 7-14 (1983).

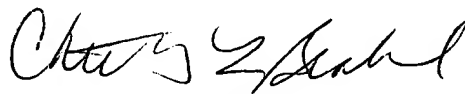
These Patent and Non-Patent Publications are also listed on Applicant's Substitute Form PTO-1449 which is attached herewith.

Pursuant to 37 C.F.R. § 1.98(d), the documents are not enclosed. These documents were cited by or submitted to the U.S. Patent Office in the Parent Applications, Serial No. 08/132,284 filed on October 6, 1994, and Serial No. 08/398,139 filed on March 13, 1995 to which this application relates back for an earlier filing date under 35 U.S.C. § 120.

In view of the present submission, it is believed that the present application is in all respects complete, and in condition for examination and favorable consideration.

If the Examiner has any questions or comments relating to the present invention, he or she is respectfully invited to contact Applicants' attorney at the telephone number set forth below.

Respectfully submitted,



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Dated: May 4, 2001

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